

IN THE SPECIFICATION:

Please insert the following heading on page 1 after the title of the invention:

BACKGROUND OF THE INVENTION

Please amend the paragraph on page 1, line 5 as follows:

The present invention relates to a stereophonic apparatus having a multiple switching function and an apparatus for controlling sound signals ~~signal~~, and more particularly, to a stereophonic apparatus having a multiple switching function and an apparatus for controlling sound signals ~~signal~~ which mixes the sound signals output from a ~~plural~~ plurality of sound apparatuses to output them at once and enables to output them multiply or selectively.

Please amend the subheading on page 1, line 11 as follows:

[[PRIOR]] DESCRIPTION OF THE RELATED ART

Please amend the paragraph on page 1, line 12 as follows:

Recently, as the ~~restriction~~ restrictions on using a mobile phone in a car ~~[[gets]]~~ get tougher, the use of hands-free phone is increasing rapidly. There are a typical hands-free phone attached on one side of the inside of the car and a built-in hands-free phone mounted internally. The built-in hands-free phone is generally used by mounting the single unit, with an exclusion of a speaker from the constitutional units of conventional external hands-free phone, in the inner

unit of the car during the production process of the car and connecting the speaker to the speaker of car audio.

Please amend the paragraph on page 1, line 26 as follows:

Referring to Fig. 1, an audio switch 116 is switched by a switching controlling unit 124 and applies the audio signal which is output from one of the audio transmission ~~terminal~~ terminals of the media playing unit 118, a radio receiving unit 120, and the phone interface 114 to the audio amplifier 122. The audio amplifier 122 amplifies the audio signal transmitted via the audio switch 116 and the audio signal is output through the speaker 110.

Please amend the paragraph on page 2, line 19 as follows:

The present invention solves the problems mentioned above, and provides a stereophonic apparatus having multiple switching function and an apparatus for controlling sound signals ~~signal~~, which can let only a high level sound signal ~~[[to]]~~ be heard, by a mute phenomenon, that relatively a weak signal can hardly be heard, resulting from mixing the sound signals output from multiple sound apparatuses and letting them to be output at once.

Please amend the paragraph on page 2, line 24 as follows:

And also, the present invention provides a stereophonic apparatus having a multiple switching function and an apparatus for controlling sound ~~signal~~ signals which can output the

sound signals output from multiple sound apparatuses multiply or selectively.

Please amend the paragraph on page 2, line 27 as follows:

The present invention to achieve the goals mentioned above, is a stereophonic apparatus having a multiple switching function, which an audio signal generating unit for generating an audio signal, a sound signal controlling unit for outputting a sound signal to a sound signal input terminal of an external sound apparatus and controlling path of a sound signal output from a sound signal output terminal of said external sound apparatus, a mixing unit for generating a mixed sound signal by mixing an audio signal input from said audio signal generating unit and a sound signal input through said sound signal controlling unit, an audio amplifying unit for amplifying a mixed sound signal input from said mixing unit, and an output unit for outputting a mixed sound signal amplified by said audio amplifying unit.

Please amend the paragraph beginning on the last line of page 2 as follows:

According to the present invention, a stereophonic apparatus having a multiple switching function, which can let only a high level sound signal to be heard, by a mute phenomenon, that a relatively [[a]] weak signal can hardly be heard, resulting from mixing the sound signals output from multiple sound apparatuses and letting them to be output at once, is provided. Also, according to the present invention, a stereophonic apparatus having a multiple switching function enabling to output the sound signals output from multiple sound apparatuses multiply or

selectively is provided.

Please amend the subheading on page 4, line 1 as follows:

DETAILED DESCRIPTION OF ~~THE PREFERRED~~ EXEMPLARY EMBODIMENTS

Please amend the paragraph on page 4, line 2 as follows:

Hereinafter, referring to the following appended drawings, ~~the preferred~~ exemplary embodiments of the present invention will be explained in detail.

Please amend the paragraph on page 4, line 4 as follows:

Fig.2 is a block diagram of the stereophonic apparatus having a multiple switching function according to the present invention.

Please amend the paragraph on page 4, line 6 as follows:

As shown in Fig.2, the stereophonic apparatus having a multiple switching function comprises an audio signal generating unit 210, a mixing unit 220, an audio amplifying unit 230, an output unit 240, a sound signal controlling unit 250-2, and ~~include~~ includes an external sound apparatus having a sound signal input terminal 265-1 and a sound signal output terminal 265-2.

Please amend the paragraph on page 4, line 24 as follows:

In the following, the operation of the stereophonic apparatus having a multiple switching function will be explained according to the present invention in detail referring to Fig. 2.

Please amend the paragraph on page 4, line 34 as follows:

~~And the~~ The mixed sound signal, which is mixed in the mixing unit 220 and then is input to the audio amplifying unit 230, is amplified in the amplifying unit 230 adjusted to an amplification factor fitted to the power level of the mixed sound signal. Therefore, ~~[[since]]~~ because the audio signal having low level, output from the audio signal generating unit 210, still has low level even though it is amplified by the audio amplifying unit 230, it can hardly be heard by the user as a mute phenomenon occurred. Also, when the sound signal having high level output from the sound signal output terminal 265-2 of the mobile phone 260 is output through the output unit 240, it can be heard by the user as a normal audio is heard, since the level gets higher if it gets amplified by the audio amplifying unit 230.

Please amend the paragraph on page 5, line 18 as follows:

The microphone unit 251 has one end connected to the sound signal input terminal 265-1 of the mobile phone 260 and the other end connected to the GND. The microphone unit 251 converts the user's voice signal to a sound signal and outputs this sound signal to the sound signal input terminal 265-1 of the mobile phone 260.

Please amend the paragraph on page 6, line 14 as follows:

As shown in Fig.4, the sound signal controlling unit 250-4 according to the second embodiment has additionally the multiple selecting switch 258 in comparison with the sound signal controlling unit 250-3 of the first embodiment. Therefore, explanations of the same units with the first embodiment will be shortened and only ~~about~~ the multiple selecting switch 258, the left mixing unit 220-1 and right mixing unit 220-2 will be explained.

Please amend the paragraph on page 6, line 23 as follows:

At this point, the multiple selecting switch 258 and the secret call switch 257 can be integrated into one switch by a simple change of design which is obvious to those skilled in the art, as the secret call and multiple selecting switch 257-8 as shown in Fig.6 mentioned later. The sound signal output from the sound output terminal 265-2 of the mobile phone 260 is output to the ~~secrete~~ secret call output unit 255 to use it as a secrete call switch when the switch is switched to a ~~secrete~~ secret call. The sound signal output from the sound signal output terminal of the mobile phone 260 is switched to at least one of the left mixing unit 220-1 and the right mixing unit 220-2 when the switch is not switched to a secrete call to use it as a multiple selecting switch. Accordingly the switch can be used as a secrete switch and a multiple selecting switch.

Please amend the paragraph on page 7, line 2 as follows:

Therefore the sound signal input from the sound signal output terminal 265-2 is output through the L output unit 240-1/ R output unit 240-2 after it is amplified by the L audio amplifying unit 230-1/ R audio amplifying unit 230-2 when the multiple selecting switch 258 is switched to the L mixing unit 220-1/R mixing unit 220-2, and the R audio signal/L audio signal output from audio signal generating unit 210 is output to the R output unit 240-2/L output unit 240-1 after it is amplified by the R audio amplifying unit 230-2/ L audio amplifying unit 230-1. Accordingly, the user can hear the sound signal through the L output unit 240-1/ R output unit 240-2 and the audio signal through the R output unit 240-2/L output unit 240-1.

If the multiple selecting switch is switched to both the L mixing unit 220-1 and the R mixing unit 220-2, the sound signal input from the sound signal output terminal 265-2 is output through both the L output unit 240-1 and the R output unit 240-2 after it is amplified by the L audio amplifying unit 230-1 and the R audio amplifying unit 230-2. ~~And the~~ The audio signal input from the audio signal generating unit 210 is muted, so that the user can hardly hear the audio signal.

Please amend the paragraph on page 7, line 21 as follows:

As shown in Fig.5, the sound signal controlling unit 250-5 according to the third embodiment has additionally the hands-free phone and sound linker selecting switch 259 in comparison with the sound signal controlling unit 250-4 according to the second embodiment.

Therefore, explanation about the same units with the first and second embodiment will be shortened and only ~~about~~ the hands-free phone and sound linker selecting switch 259 will be explained.

Please amend the paragraph on page 8, line 4 as follows:

~~And when~~ When the hands-free phone and sound linker selecting switch 259 is connected to the left mixing unit 220-1, the external sound apparatus is generally not assumed as the mobile phone but as the use of MP3 and DVD as external audio apparatuses. That is, it is to use the terminal, which was used as a sound signal input terminal of the mobile phone, as the left terminal of the sound signal output terminal of the external audio apparatus, ~~[[since]]~~ because the sound signal input terminal of the external audio apparatus is divided into left and right terminal while the mobile phone has sound signal input terminal and sound signal output terminal. If we explain the overall operation assuming that the external audio apparatus is a MP3, the sound signal output from the right sound signal output terminal ~~[[go]]~~ goes through the same process as the sound signal output from the sound signal output terminal of the mobile phone in the third embodiment of the Fig.4, and is mixed with the audio signal input from the audio signal generating unit in the left mixing unit 220-1 or/and right mixing unit 220-2 in accordance with the switching of the multiple selecting switch. ~~And the~~ The sound signal output from the left sound signal output terminal of the MP3 is input to the left mixing unit 220-1 and mixed with the audio signal input from the audio signal generating unit.

Please amend the paragraph on page 8, line 24 as follows:

The sound signal output from the sound output terminal 265-2 of the mobile phone 260 is output to the ~~secrete~~ secret call output unit 255 to use it as a ~~secrete~~ secret call switch when the switch is switched to a ~~secrete~~ secret call. The sound signal output from the sound signal output terminal of the mobile phone 260 is switched to at least one of the left mixing unit 220-1 and the right mixing unit 220-2 when the switch is not switched to a ~~secrete~~ secret call to use it as a multiple selecting switch. That is, when the switch is switched to a ~~secrete~~ secret call, the sound signal output from the sound signal output terminal 265-2 of the mobile phone 260 is output the ~~secrete~~ secret call output unit 255, and when the switch is not switched to a ~~secrete~~ secret call, the sound signal output from the sound signal output terminal 265-2 of the mobile phone 260 is switched to at least one of the left mixing unit 220-1 and the right mixing unit 220-2. Accordingly the switch can be used as a ~~secrete~~ switch and a multiple selecting switch.

Please amend the paragraph on page 9, line 12 as follows:

The variable resistor 251-1 is used for controlling the output of microphone. It carries out a function for controlling the output of the microphone. When resistance of the variable resistor 251-1 is large, the communication party of the user of the mobile phone 260 hears the sound signal of low level since the sound output from the microphone 251-5 is reduced, when the resistance of the variable resistor 251-1 is small, the communication party of the user of the mobile phone 260 hears the sound signal of high level. However, when the value of resistance is

small, echo and howling occurs. ~~And so,~~ So resistance R should be in adequate value.

Please amend the paragraph on page 9, line 13 as follows:

The diode 251-3 prevents the ~~occurring~~ occurrence of howling and echo during sending and receiving the sound signal from the sound signal output terminal of the mobile phone and the voice signal of the user from the microphone 270 in two directions, and when the diode 251-3 is constructed to the opposite direction, the transmitting sound is shut off and the communication party of the user cannot receive the transmitting sound signal of the user.

Please amend the paragraph on page 9, line 21 as follows:

The sound signal output from the sound output terminal 265-2 of the mobile phone 260 is output to the ~~secrete~~ secret call output unit 255 to use it as a ~~secrete~~ secret call switch when the secret call and multiple selecting switch 257-8 is switched to a ~~secrete~~ secret call. The sound signal output from the sound signal output terminal of the mobile phone 260 is switched to at least one of the left mixing unit 220-1 and the right mixing unit 220-2 when the secret call and multiple selecting switch 257-8 is not switched to a secrete call to use it as a multiple selecting switch. That is, when the secret call and multiple selecting switch 257-8 is switched to a ~~secrete~~ secret call, the sound signal output from the sound signal output terminal 265-2 of the mobile phone 260 is output to the ~~secrete~~ secret call output unit 255, and when the secret call and multiple selecting switch 257-8 is not switched to a ~~secrete~~ secret call, the sound signal output

from the sound signal output terminal 265-2 of the mobile phone 260 is switched to at least one of the left mixing unit 220-1 and the right mixing unit 220-2. Accordingly, the secret call and multiple selecting switch 257-8 can be used as a ~~secrete~~ secret switch and a multiple selecting switch.

Please amend the paragraph on page 10, line 15 as follows:

When the secret call and multiple selecting switch 257-8 is switched to the position 1/position 2, the left(L) sound signal/right(R) sound signal, input from the sound signal input terminal 265-1 of the mobile phone 260, is mixed with the L audio signal/R audio signal, input from the audio signal generating unit 210, at the L mixing unit/R mixing unit, and is amplified by the L audio amplifying unit/R audio amplifying unit, and then is output through the L output unit/R output unit. Therefore, since the L audio signal/R audio signal has relatively lower power level than the L sound signal/R sound signal, the mute phenomenon that the amplified signal by the L audio amplifying unit/R audio amplifying unit, which then is output through the L output unit/R output unit, is hardly being heard from the user, occurs. ~~And also~~ Also, the L audio signal/R audio signal can be heard from the user as a general listening of an audio, when it is amplified by the L audio amplifying unit/R audio amplifying unit and output through the L output unit/R output unit. As a result, an audio signal can be heard from one output unit and a sound signal from the other output unit.

Please amend the paragraph on page 1, line 21 as follows:

~~And when~~ When switching the hands-free phone and sound linker selecting switch 259 is switched to the position 2, the external sound apparatus is not generally assumed as a mobile phone but assumed to use MP3 and DVD as external audio apparatuses. That is, ~~[[since]]~~ because a mobile phone has sound signal input terminal and sound signal output terminal whereas an external audio apparatus has the sound signal output terminal divided into left and right terminal, it is to use one end of the mobile phone which is used as a sound signal input terminal as left one of the sound signal output terminal of the external audio apparatus. ~~If let us~~ we assume that the external audio apparatus is a MP3, the sound signal output from the right sound signal output terminal is mixed with the audio signal input from the audio signal generating unit in the left mixing unit 220-1 or/and and right mixing unit 220-2 in accordance with the switching of the multiple selecting switch as the third embodiment of the Fig.4. ~~And the~~ The sound signal output from the left sound signal output terminal of the MP3 is input directly to the left mixing unit 220-1 and is mixed with the audio signal input from the audio signal generating unit.

Please amend the paragraph beginning on the last line of page 11 as follows:

In present embodiment, the stereophonic having a multiple switching function can carry out many additional functionsu, not to mention the existing function of hands-free phone apparatus, only by the composition of the sound signal controlling unit which connects the audio

apparatus for cars and the mobile phone, that is, without using the circuit components of existing hands-free phone apparatus and sound linker apparatus.

Please amend the paragraph on page 12, line 5 as follows:

Although the present invention is explained by referring to the ~~preferred~~ exemplary embodiments shown above, but various modifications and transformations can be made without departing from the spirit and scope of the invention. Therefore, it is obvious which claims as below include various modifications and transformations belonging to the scope of the invention.